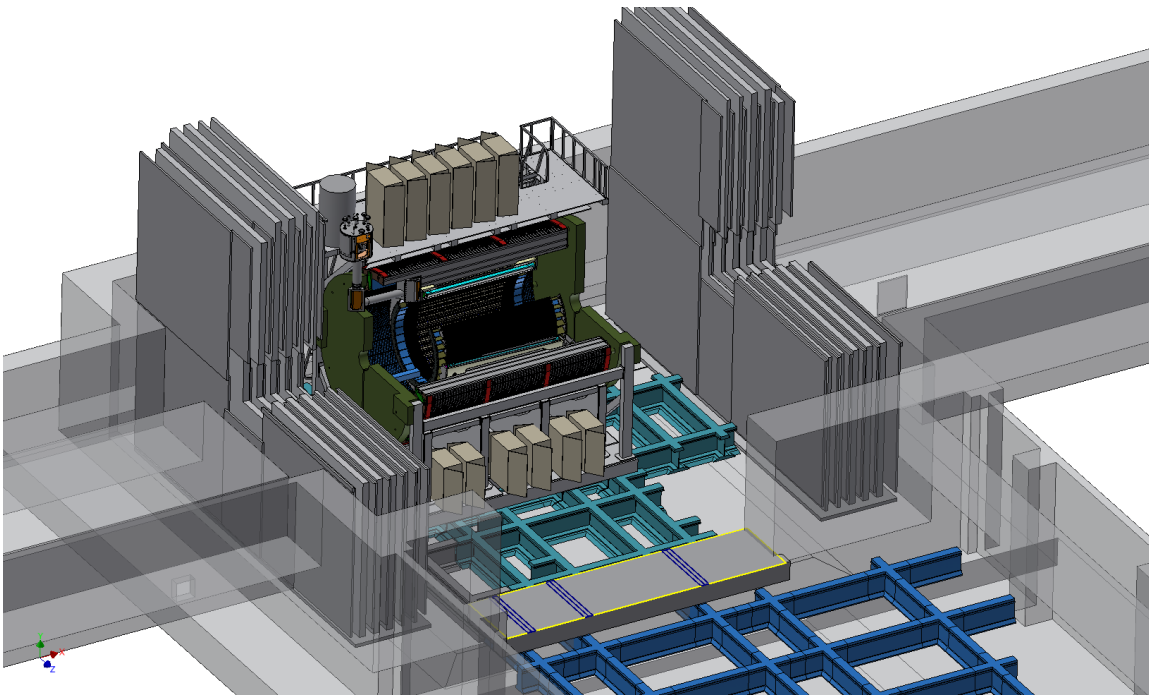


sPHENIX

Preliminary Safety and Hazard Analysis



**Brookhaven National Laboratory
Upton, New York**

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sPHENIX PHAR

The Preliminary Hazard Analysis Report (PHAR) is required to be prepared for the proposed sPHENIX project as part of the Critical Decision 1 (CD-1) process. This is in accordance with DOE Order 413.3B "Project Management Direction for Cost & Schedule, Safeguards and Security ESSH Requirements".

Since sPHENIX will be designed, built and installed into the existing RHIC 1008 Hall, the PHAR development will similarly follow the safety analysis process described in the C-AD 2011 Safety Assessment Document (SAD) chapter 4. The method begins by systematically identifying all the hazards of a given operation. The C-AD accomplishes this initial step using two primary Web based techniques. They are: 1) C-AD Hazard Screening Tool, and 2) C-AD Design Review Questionnaire. A summary of the resulting hazards and follow up assignments are sent to the responsible project sub-system managers for disposition.

Following the PHAR, a Hazard Screening Report is produced to detail proposed hazards and the follow up safety review actions. There are numerous committees that are charged with reviewing this report. The principle committees are:

- 1) C-A Radiation Safety Committee
- 2) C-A Experimental Safety Review Committee
- 3) C-A Accelerator Systems Safety Review Committee
- 4) C-A ALARA Committee